Facility Name: MEK SPILL

Location: HICKSVILLE, NEW YORK

EPA Region: II

Person(s) in Charge of the Facility:

Name of Reviewer: _____ Date: _____

General Description of the Facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Scores: S_M = 17.78 (S_{gw} = 30.77 S_{sw} = 0 S_a = 0)

S_{FE} =

S_{DC} =

HRS COVER SHEET

336765

GROUND WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 (45)	1	45	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 3	2		6	
Net Precipitation	0 1 2 3	1		3	
Permeability of the Unsaturated Zone	0 1 2 3	1		3	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
3 Containment	0 1 2 3	1		3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 (6) 9 12 15 18	1	6	18	
Hazardous Waste Quantity	0 1 (2) 3 4 5 6 7 8	1	2	8	
Total Waste Characteristics Score			8	26	
5 Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 35 (40)	1	40	40	
Total Targets Score			49	49	
6 If line 1 is 45, multiply 1 x 4 x 5 / If line 1 is 0, multiply 2 x 3 x 4 x 5			17640	57,330	
7 Divide line 6 by 57,330 and multiply by 100	S_{gw} = 30.77				

NO SURFACE WATER

SURFACE WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1		45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1		3	
1-yr. 24-hr. Rainfall	0 1 2 3	1		3	
Distance to Nearest Surface Water	0 1 2 3	2		6	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
3 Containment	0 1 2 3	1		3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1		18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				26	
5 Targets					4.
Surface Water Use	0 1 2 3	3		9	
Distance to a Sensitive Environment	0 1 2 3	2		6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1		40	
Total Targets Score				55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5				64,350	
7 Divide line 6 by 64,350 and multiply by 100 S_{sw} =					

AIR ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	(0)	45	5.1
Date and Location:	Nothing detected at breathing zone				
Sampling Protocol:	PID				

If line 1 is 0, the S = 0. Enter on line 5.
If line 1 is 45, then proceed to line 2.

2 Waste Characteristics	Assigned Value (Circle One)	Multiplier	Max. Score	Ref. (Section)
Reactivity and Incompatibility	0 1 2 3	1	3	5.2
Toxicity	0 1 2 3	3	9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	8	
Total Waste Characteristics Score			20	

3 Targets	Assigned Value (Circle One)	Multiplier	Max. Score	Ref. (Section)
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1	30	5.3
Distance to Sensitive Environment	0 1 2 3	2	6	
Land Use	0 1 2 3	1	3	
Total Targets Score			39	

4 Multiply 1 x 2 x 3			35,100
5 Divide line 4 by 35,100 and multiply by 100	S_a = (0)		

	S	S^2
Groundwater Route Score (S_{gw})	30.77	946.79
Surface Water Route Score (S_{sw})	0.00	0
Air Route Score (S_a)	0.00	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73$		$S_M = 17.78$

WORKSHEET FOR COMPUTING S_M

FIRE AND EXPLOSION WORK SHEET

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	=	8	
Total Waste Characteristics Score				20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Total Targets Score				24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 5 by 1,440 and multiply by 100			S_{FE} =		

DIRECT CONTACT WORK SHEET

	Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1	Observed Incident	0 45	1		45	8.1
	If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2	Accessibility	0 1 2 3	1		3	8.2
3	Containment	0 15	1		15	8.3
4	Waste Characteristics Toxicity	0 1 2 3	5		15	8.4
5	Targets					8.5
	Population Within a 1-Mile Radius	0 1 2 3 4 5	4		20	
	Distance to a Critical Habitat	0 1 2 3	4		12	
	Total Targets Score				32	
6	If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5				21,600	
7	Divide line 6 by 21,600 and multiply by 100 S_{DC} =					